

CHANGE IN SELF-CONCEPT AS  
A FUNCTION OF OPEN AND CLOSED  
BELIEF SYSTEMS

By  
MICHAEL VICTOR FROMHART

A DISSERTATION PRESENTED TO THE GRADUATE COUNCIL OF  
THE UNIVERSITY OF FLORIDA  
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE  
DEGREE OF DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA  
August, 1967

#### ACKNOWLEDGMENTS

The author would like to express gratitude to his supervisory committee, Dr. Audrey S. Schumacher, Dr. Richard J. Anderson, Dr. Harry A. Grater, Jr., and Dr. E. Wilbur Bock, for their stimulation and encouragement. In particular, gratitude is expressed to the committee chairman, Dr. James C. Dixon, who provided the inspiration and kindly support for this undertaking.

The author would also like to especially thank his wife, Donna, not only for her valuable assistance in data collection, but for her love and understanding through the difficulties of this investigation.

# TABLE OF CONTENTS

	Page
ACKNOWLEDGMENTS . . . . .	ii
LIST OF TABLES. . . . .	v
CHAPTER	
I. INTRODUCTION . . . . .	1
Hypotheses and Predictions . . . . .	8
II. METHOD . . . . .	13
Subjects . . . . .	13
Measures . . . . .	13
Procedure. . . . .	16
III. RESULTS. . . . .	21
Summary of Pretreatment Findings . . . . .	21
Posttreatment Findings . . . . .	25
IV. DISCUSSION . . . . .	33
The Control Condition. . . . .	33
Suggestions for Future Research. . . . .	41
V. SUMMARY. . . . .	43
APPENDICES. . . . .	46
A. INSTRUCTIONS AND SCORE SHEET FOR THE D SCALE . . . . .	47
B. INSTRUCTIONS AND SCORE SHEET FOR THE IAV . . . . .	50
C. SENTENCE-COMPLETION ITEMS. . . . .	52

# TABLE OF CONTENTS, Continued

APPENDICES, <u>Continued</u>	Page
D. POSITIVE EVALUATIONS . . . . .	53
E. NEGATIVE EVALUATIONS . . . . .	55
F. VARIANCE RATIOS FOR THE MAJOR VARIABLES. . . . .	57
REFERENCES. . . . .	59
BIOGRAPHICAL SKETCH . . . . .	62

# LIST OF TABLES

TABLE	Page
1. Dogmatism Scores . . . . .	22
2. Pretreatment Self-Concept Scores . . . . .	22
3. Pretreatment Discrepancy Scores. . . . .	23
4. SCAT Scores. . . . .	24
5. Mean Changes in the Control Group After a One-Week Interval. . . . .	25
6. Self-Concept and Self-Ideal Discrepancy Change of Subjects Given a SPE and MPE (Procedure A) . . . . .	26
7. Self-Concept and Self-Ideal Discrepancy Change of Subjects Given a SNE and MNE (Procedure A) . . . . .	27
8. Self-Concept and Self-Ideal Discrepancy Change of Subjects Given a SPE and MPE (Procedure B) . . . . .	29
9. Self-Concept and Self-Ideal Discrepancy Change of Subjects Given a SNE and MNE (Procedure B) . . . . .	30
10. Comparison of Males and Females in Terms of Self- Concept and Self-Ideal Discrepancy Change Over All Conditions . . . . .	32
11. Two-way Analysis of Variance of Self-Concept Change Scores for Males and Females (Procedure A) . . . . .	57
12. Two-way Analysis of Variance of Self-Ideal Discrepancy Change Scores for Males and Females (Procedure A). . . . .	57
13. Two-way Analysis of Variance of Self-Concept Change Scores for Males and Females (Procedure B) . . . . .	58
14. Two-way Analysis of Variance of Self-Ideal Discrepancy Change Scores for Males and Females (Procedure B). . . . .	58

## CHAPTER I

### INTRODUCTION

In the course of his development, an individual comes to perceive himself as a unique configuration of characteristics and abilities toward which he can feel positively or negatively. This organization of attitudes toward the self is called a person's self-concept. Like any other organization of attitudes, the self-concept may be expected to change under certain conditions. It is this possibility of change in self-concept that is the focus of the present investigation.

Until recently, studies of change in self-concept have involved changes occurring "spontaneously" over some temporal interval (Engel, 1959), or changes attributed to psychotherapeutic treatment (Butler and Haigh, 1954; Caplan, 1957). In these investigations, there was no control of independent variables. More recently, the effects of direct manipulation of independent variables have been studied by Videbeck (1960), Maeher, Mensing and Nafziger (1962), and Haas and Maeher (1965). These three studies provided evidence of changes in self-concept using approval or disapproval by a significant other with regard to a selected behavioral task. In addition, the Haas and Maeher study showed that changes in self-concept related to a specifically praised or criticized task are durable over time, subject to dosage and show generalization to other areas of self-concept not specifically subjected to an evaluation.

More pertinent to the present investigation is a study by Evans (1962). She had college undergraduates fill out personality inventories. Then one-half of the subjects received fake personality evaluations. Following the experimental manipulation, all subjects again answered the inventory. The experimental subjects modified their self-pictures in the direction of the fake descriptions. Change was noted for both the positive and negative evaluations.

Weaver (1965) has also experimentally produced changes in self-concept by the use of positive and negative personality evaluations. He divided his subjects by self-concept level into high, medium, and low groups and found that high self-concept male and female subjects showed no changes which could be attributed to either the positive or negative evaluations, while the low self-concept subjects raised their self-concept scores after both the positive and negative evaluations. Results were discussed in terms of dissonance theory.

The present study undertakes to further investigate variables which may be related to change in self-concept. These variables are dogmatism, positiveness and negativeness of personality communications, sex of the subject, and disqualification of a received personality communication. Specific hypotheses will be derived from information now to be considered.

Rokeach (1960) has extensively discussed the empirical finding of general authoritarianism or dogmatism. He has produced evidence that the California F Scale (Adorno et al., 1950) is not a true measure of general authoritarianism. The Dogmatism Scale (Rokeach, 1960) was

constructed to obtain a more valid measure of general authoritarianism or dogmatism.

Rokeach states that dogmatism is related to the openness or closedness of a person's belief-disbelief system. The belief-disbelief system is a hypothetical construct which includes all the beliefs and disbeliefs a person holds about the world (content) and the ways in which these beliefs and disbeliefs are related to one another (structure).

The concept of self or beliefs and disbeliefs concerning the self constitute a central part of the total configuration of the belief-disbelief system. The basic characteristic that defines the extent to which a system is open or closed is the ability or inability to "receive, evaluate, and act on relevant information received from the outside on its own merits, unencumbered by irrelevant factors in the situation arising from within the person or from the outside" (p. 57). Examples of factors arising within the person are isolated beliefs, and the needs for self-aggrandizement, anxiety reduction and defense of the ego. The most salient external factor is pressure from prestige or authority figures.

With the purpose of testing some of Rokeach's hypotheses, Plant et al. (1965) have studied personality differences in high and low dogmatic subjects. The two groups differed significantly on the five California Personality Inventory (CPI) scales utilized. The investigators characterized the high dogmatic subjects as impulsive, defensive, and conventional and stereotyped in thinking. Also, Fillenbaum and Jackman (1961) found a significantly positive relationship between Welsh's



anxiety scale scores based on 39 MMPI items and Dogmatism scores.

These findings lend some support to Rokeach's contention that the more closed the belief-disbelief system is, the more it can be viewed as an organization of defense mechanisms against threat from outside the person. Rokeach believes that "in the extreme, the closed system is nothing more than the total network of psychoanalytic defense mechanisms organized together to form a cognitive system and designed to shield a vulnerable mind"(p. 70). Because of this tight defensive network, the closed system, including beliefs and disbeliefs concerning the self, ought to be extremely resistant to change. However, this may be only relatively true. It was also predicted by Rokeach that when the closed system is presented with information to evaluate, not only internal factors may interfere with the evaluation, but also factors in the social environment, primarily authority and prestige figures. There is some evidence, to be fully discussed later, that when the source of the information is highly prestigious, it becomes relatively more difficult for the highly dogmatic person to separate adequately the source from the information and evaluate each independently (Powell, 1962). Under this condition, highly dogmatic persons may be influenced to change in aspects of their belief-disbelief systems.

Some of the effects of personality communications upon self-attitudes or self-concept have already been mentioned (Evans, 1962; Weaver, 1965). These studies have utilized both positive and negative personality evaluations. The present study is interested also in the effects of positive and negative evaluations and primarily in the effects of their degree of positiveness and negativeness.

No studies have directly assessed the effects of degree of positiveness but have generally found that persons will change their self-concepts in the direction of a positive evaluation (Evans, 1962). Also, such change appears relatively independent of self-concept level (Weaver, 1965). It thus appears quite straightforward to assume that a positive evaluation or communication affords ego gratification to the person receiving it, and the more positive the evaluation the greater the gratification producing increasing amounts of self-concept change. On this basis, there would be expected more change by dogmatic versus non-dogmatic persons, because of the former's hypothesized exaggerated need for ego enhancement.

Somewhat more complicated is the question of effects of negative evaluations. Concerning the degree of negativity of a personality communication, Bergin (1962) gave subjects an evaluation concerning their masculinity-femininity discrepant from their self-evaluations on a masculinity-femininity scale. Three levels of increasing discrepancy were used. Bergin found that the amount of change in self-attitude increased "as a monotonic function of discrepancy under high credibility conditions in contrast to little or no change under low credibility conditions"(p. 437). Evidently, communicator credibility is a salient factor in the acceptance of a communication, even of a highly negative communication having self-reference. Communicator credibility will be dealt with further in a following section.

A negative personality communication or evaluation may constitute a threat to the beliefs and attitudes concerning the self. Indeed,

any perceived attack directed toward the self-concept would be expected to be at least somewhat stressful. Furthermore, a negative evaluation may be perceived as more or less threatening or stressful by different types of persons, possibly producing very different kinds of changes in self-concept.

In this regard, Weaver (1965) has reported evidence of what has been called the "boomerang effect" (changes of attitude in a direction opposite to that advocated by a communicator). The "boomerang effect" may occur when the positions of the communicator and receiver are very discrepant, and especially when the communication is perceived as threatening. In other words, a tendency to change contrary to the intentions of the communicator may develop if the communication is perceived as attacking an attitude which is a very important part of a person's self-concept (Krech et al., 1962). In Weaver's case, subjects with a high anxiety level significantly increased their self-concept scores more often than subjects with a low anxiety level after being presented with a negative personality evaluation. Thus, in these highly anxious subjects it appeared that their increase in self-concept after the negative evaluation was primarily a compensatory defensive reaction to threat. Similarly, Rokeach (1960) has suggested that the relatively closed belief-disbelief system can be largely characterized as an organization of defenses and anxiety-reducing mechanisms which are employed to counter threat. If this is true, highly dogmatic persons may be particularly prone to displaying "boomerang effects" under certain conditions. These conditions will be specified in detail later.

There is a good deal of evidence that high communicator credibility is a function of older rather than younger persons, of high status rather than low status, and of experts rather than non-experts (Hovland et al., 1953). High communicator credibility has been generally considered a potent variable in the production of attitude change (Hovland and Weiss, 1951; Tannenbaum, 1956).

As mentioned above, Bergin (1962) found that change in self-attitude was significantly affected by credibility of the communicator, high credibility being associated with consistently greater change. Also, Powell (1962) has reported a finding relevant to the present study. He found that high and low dogmatic persons may differ in their susceptibility to communicator credibility. The highly dogmatic subjects in his study were not able to separate the source from the message as well as the low dogmatic subjects. Powell concluded that "in the case of the open-minded receivers, capable of evaluating the source and the message independently, it may be that source credibility is not as important in effecting opinion change"(p. 63). That is, highly dogmatic persons may be expected to be more subject to change than low dogmatic persons when influence is attempted by a very credible communicator. This finding tends to confirm Rokeach's prediction concerning confusion of the source and the information in closed-minded individuals, particularly when authority or prestige figures are involved.

Since this study will utilize both male and female subjects, a discussion concerned with sex differences and susceptibility to

communicator influence is appropriate. It has been found, at least among older adolescents, that females accept significantly more suggestions from a prestige source than males. In fact, males at this age seem quite unimpressed by the prestige of a communicator (Patel and Gordon, 1960). Weaver (1965) has also reported a similar phenomenon.

#### Hypotheses and Predictions

Since the highly dogmatic person's psychological make-up is theorized to be such that he has an exaggerated need to possess an impregnable self-concept and to enhance his conception of himself when the opportunity arises, it might be expected that he would be more prone to accept a positive personality communication or evaluation than a low dogmatic person. Furthermore, the greater the degree of positiveness of the evaluation, the greater the change in self-concept in a positive direction would be expected for the highly dogmatic person in relation to the low dogmatic person.

On the other hand, because the highly dogmatic person can be characterized as possessing a defensive belief-disbelief system including his self-system or self-concept, he can be expected to resist greatly any change in it when confronted with negative information concerning his self. However, when the communicator is a very credible source of information, the highly dogmatic individual is very likely to confuse the source with the information. Thus, he may in this way be influenced to change his self-concept. This would seem to be especially true when the information is only slightly negative in

content and hence only mildly threatening. Whether even greater change may occur when the information is strongly negative and hence more threatening is highly problematical. Agreement with authority figures may serve to reduce some of the anxiety produced, but when this also involves agreement with a very negative communication, the greater change in self-concept expected for the highly dogmatic person may be attenuated by increased anxiety induced by a positive-negative type conflict. This assumes that increasing the strength of the negative value serves to reduce the likelihood of confusing information (negative) with source (positive). In such a case, the highly dogmatic person is faced with a clearer but more conflictful choice. Thus, the need to reduce the more intense anxiety produced by an extremely threatening personality communication may well override the tendency to agree with the source. In fact, the threat may be expected to be so great as to induce the highly dogmatic person to respond with a compensatory change in self-concept in a positive direction ("boomerang effect") to obtain self-assurance and reduction of anxiety with regard to threatened validity of the self-concept.

Since the low dogmatic person is expected to be better able to separate source and information, he should be less influenced by communicator credibility. Furthermore, a low dogmatic person is expected to be less threatened by negative information concerning his self because, since his self-system is not primarily an organization of defense mechanisms used to counter threat, he should more readily be able to realistically evaluate information in relation to his

self-concept. Therefore, less anxiety ought to be produced because the evaluation should be perceived as less threatening (in relation to the highly dogmatic person), and drastic devices for the reduction of anxiety (change in self-concept) need not be used.

The above hypotheses have related specifically to a situation where subjects receive a personality communication or evaluation from a reasonably credible source with self-concept subsequently expected to change in certain predicted directions. A different situation arises, however, if, after the personality evaluation is received, it is invalidated by the source of the communication. The question then is: will there still be some identifiable changes in self-concept even though the communication has been disqualified? Previous discussion of the open and closed self-structure suggests possible differential response under this condition.

Before invalidation of the positive personality communications, it is expected that the highly dogmatic person will have readily changed his self-concept in a positive direction because of his need for ego gratification and self-enhancement. It is also assumed that the highly dogmatic person will tend to incorporate the positive information into his self-system, and thus it may become an integral part of his self-concept. Hence, invalidation of the positive evaluations should little affect a return of the self-concept to its original level and so the self-concept is expected to be maintained at the changed level. On the other hand, the low dogmatic person is expected to return more readily to his original self-concept level.

When the highly dogmatic person is confronted with a strongly negative personality communication, the "boomerang effect" is expected to occur, and his self-concept will be raised. Because of the tendency to maintain a positive self-image and the defensiveness associated with its maintenance, when the strongly negative personality evaluation is invalidated, it is expected that the highly dogmatic person will retain his self-concept at the changed level. However, when a mildly negative evaluation is received, negative change in self-concept is expected for the highly dogmatic person. But upon invalidation, there should be a return to the original self-concept level, again because of the need to maintain a more favorable self-image. The low dogmatic person should also respond to the invalidation of the evaluation by returning to his original self-concept level if any change had previously occurred.

With regard to sex differences, females should show more change in response to the personality evaluations in both the high and low dogmatic groups than the males, with most change relative to the males occurring in the high dogmatic group. This would be expected because females are apparently more susceptible to influence by authority and prestige figures.

It is now possible to make some definite predictions. The degree of dogmatism, the positiveness and negativeness of the personality communications, invalidation of a received communication and the sex of the subject are expected to account for changes in self-concept according to the following specific predictions:



1. Positiveness of the personality evaluation (strong and mild) will (a) produce corresponding changes in self-concept (positive direction) which (b) will be greater for high dogmatism than for low dogmatism.
2. (a) A strongly negative personality evaluation is expected to produce a "boomerang effect" (change in a positive direction) which will be greater for high dogmatism, while (b) a mildly negative evaluation will produce change in self-concept in a negative direction which will be greater for high dogmatism.
3. Following invalidation of the positive evaluations, (a) changes in self-concept will be greater for the strongly positive evaluation in comparison with the mildly positive evaluation, and (b) changes will be more readily maintained by high dogmatism in comparison to low dogmatism.
4. Following invalidation, (a) positive change by high dogmatism due to the strongly negative evaluation will tend to be maintained more readily relative to low dogmatism, while (b) negative change due to the mildly negative personality evaluation will be maintained by neither high nor low dogmatic subjects.
5. Females will show more change in self-concept than males under all conditions, with the females producing the most change relative to the males in relation to high dogmatism.

## CHAPTER II

### METHOD

#### Subjects

The experimental subjects used in this study were 240 undergraduate college students at the University of Florida. There were 120 females and 120 males. The subjects were taken from an introductory psychology course in which part of the grade is determined by participation in psychological experiments. This population was chosen because of its availability and relatively homogeneous character with respect to age and socio-economic background.

In order to establish a base rate of change for self-concept, control subjects were also used in this study and were recruited from the introductory psychology course. There were 52 males and 50 females.

#### Measures

The Dogmatism Scale, Form E (Rokeach, 1960) was used as the measure of open and closed belief systems. The scale consists of 40 items with agreement scored as closed and disagreement as open (Appendix A).

The Dogmatism Scale went through five revisions in order to increase reliability. Test-retest correlations obtained by Rokeach over a period of one to six months were of the order .71 to .84. Recently, Zagana and Zurcher (1965) have also found the reliability of the scale to be similar to that provided by Rokeach's research.

In a validation study reported by Rokeach (1960), graduate students in psychology selected high and low dogmatic persons from among their friends and acquaintances. Those high in dogmatism scored significantly higher than low dogmatic persons on the Dogmatism Scale. Zagana and Zurcher (1965) found in their study that the construct of dogmatism was supported by validity data involving individual behavior and group processes.

Recently, some question has arisen as to the relationship between dogmatism and intelligence. Rokeach (1960) claims that little or no relationship exists. However, there is considerable evidence to the contrary. For instance, Pannes (1963) has found, using junior and senior high school students, a significant negative correlation for the entire population between degree of dogmatism and level of intelligence. However, Pannes does not report what intelligence measure she used.

Plant et al. (1965) have also considered this problem and have obtained some interesting results. Their subjects were 4,506 freshmen junior college students. The intelligence measure used was the School and College Abilities Test (SCAT) and personality variables were derived from the California Personality Inventory (CPI). Two studies were made. In the first study, differences were found in personality variables and in SCAT scores for high and low dogmatic subjects. In order to test whether or not the personality findings were a function of intelligence, a second study was done which was essentially a repeat of the first, again using high and low dogmatic subjects; but this time subjects

were matched on SCAT scores. The investigators still found significant differences in CPI variables between high and low dogmatic subjects.

Since the present study is concerned with the effects of certain variables upon personality attributes which are supposed to differentiate open and closed systems, it does not seem in this instance that a control for intelligence would be especially necessary. On the other hand, it appears that the ability to evaluate incoming information effectively and then relate it to the self-concept in a meaningful way must also somehow involve the intellectual capacity of the person doing the evaluating, in addition to the need for self-enhancement and defense of the self-structure. Therefore, an intelligence measure (SCAT scores) was included in order to further analyze the effects of the personality communications on change in self-concept, especially with regard to the dogmatism variable.

The Bills Index of Adjustment and Values (IAV), Adult and High School Senior Form (Bills, 1958) was used to measure self-concept and self-ideal discrepancy (Appendix B). The instrument is based on 49 trait names selected from Allport's list of traits which, according to Bills, were items which occurred most frequently in client-centered interviews. The subject usually gives three answers to each item:

1. How often are you this sort of person?
2. How do you feel about being this way?
3. How much of the time would you like this trait to be characteristic of you?

The sum of 1 is the Self score; the sum of 2 is the Self-Acceptance score (the Self-Acceptance score was not used in the present study for reasons which will be discussed shortly); and the difference between 1 and 3 is the Self-Ideal discrepancy. Each answer is marked on a five-point scale ranging from "seldom" to "most of the time."

Split-half reliability of Self scores with 237 college students, using the Spearman-Brown formula, was .91, and of discrepancy scores was .88. Test-retest reliability for Self scores was .83 and for discrepancy scores was .87 (Bills, 1958).

Concerning validity, Bills (1954) found a lower incidence of five out of six Rorschach depression signs associated with a small Self-Ideal discrepancy. Also, low Taylor Manifest Anxiety Scale scores have been found to be associated with a small discrepancy (Cowen et al., 1957). The Self scores are highly correlated with Self-Acceptance scores (.90) and this may be taken to indicate that both are measuring essentially the same construct (Wylie, 1961). For this reason, Self-Acceptance scores were not used in this study.

In order to make the test-taking situation more plausible in relation to the disclosure of personality characteristics by the subjects, some sentence-completion items were included (Appendix C). The inclusion of these items was expected to enhance the impact of the personality communications.

#### Procedure

Two slightly different experimental procedures were utilized which will be designated Procedures A and B.

In both Procedures A and B, the experiment was introduced by a person (the experimenter) who identified himself as one of the members of a research team composed of several behavioral scientists from various universities including the University of Florida. He went on to say:

Many students in universities in the United States and Canada are taking part in this project. We are interested in the different attitudes and personality traits of college students in a particular area of the country, how they differ from area to area, and from the general population. The college population can essentially be conceptualized as a cultural or social group existing within the broader social context. Such a sub-group is expected to be composed of individuals like yourselves who have some attitudes, feelings, beliefs, life goals and personality characteristics in common with other members of your group. However, each one of you is a unique person who is quite different from every other person no matter how many characteristics you may share with others. Each one of you has his own perspective in attempting to understand political, economic, and social ideas, and especially in attempting to understand yourselves and other people. Briefly then, we are interested in discovering the ways in which each college student is a representative of his campus social circle and the ways in which he is unique, different--a person unlike all other persons. It is our purpose that the information collected here and at other campuses will ultimately help to clarify the needs and problems of college students and implement programs to meet these needs and problems. We hope that we will have your fullest cooperation in making this project a complete success.

The relevant information was then collected from the subjects in the following order: first, the Dogmatism Scale; second, the Index of Adjustment and Values; and finally, a sentence-completion test. Finally, the subjects were reminded that the remaining information would be collected the following week.

The Dogmatism Scale scores for all subjects were then computed, and male and female subjects were ranked separately by dogmatism score from high to low dogmatism. The resulting distributions were then

divided in half. Beginning at the high dogmatic end of the male and female distributions, personality evaluations were assigned to subjects in the following order: strongly positive, strongly negative, mildly positive, mildly negative, which assured reasonable equivalence of dogmatism scores within the four groups (high dogmatic male, high dogmatic female, low dogmatic male, low dogmatic female) receiving personality evaluations.

The personality evaluations (Appendices D and E) consisted of general written statements concerned with anxiety, ability to relate to others, life adjustment, self-worth and other facets of personality phrased to be strongly and mildly positive and strongly and mildly negative. The evaluations were printed in IBM type and names of the experimental subjects were affixed separately using an IBM typewriter, thus presenting a highly personalized appearance.

In order to determine if the mild and strong versions of both the positive and negative evaluations could be discriminated and also to determine if the content appeared to have reference to a real person, judges rated the evaluations on degree of positiveness or negativeness and degree of believability. It was found that the degree of positiveness or negativeness could be discriminated with some accuracy and that the evaluations were all ranked fairly high on believability.

On the following week, the personality evaluations were given by the experimenter in the following manner:

Before we complete the testing this evening, I would like to tell you about something that my colleagues and I have decided upon which is unique for a study of this nature.

I and other members of our research team have for some time felt that people like you who have so often contributed to psychological research have not received any direct benefit from their labors. Thus, we have taken the information you have given us and carefully evaluated it with regard to configurations of individual personality characteristics. By doing this, we have arrived at about 25 different personality summaries, one of which is applicable to each one of you individually. We sincerely hope that you will be able to use these insights into your personality in a most fruitful manner. Because of the highly personal nature of these summaries, please do not attempt to discuss them among yourselves. Take your time, however, and read them carefully.

The evaluations were then passed out and, in Procedure A, after about five minutes the subjects were asked to complete some information similar to that collected the week before, composed of the Index of Adjustment and Values and some new sentence-completion items.

Immediately after all the information had been collected in Procedure A, the subjects were informed that the real purpose of the investigation was to measure their reactions to personal information and that the personality evaluations that they had received had nothing to do with their own individual personalities, but were assigned to each person at random. This procedure, it was hoped, served to allay any anxiety, hostility, etc., which may have been produced by the personality evaluations. Open discussion and expression of feelings about the experiment were encouraged.

Because the experimental subjects were informed concerning the true nature of the research, the possibility of feedback between the subjects in Procedures A and B was nearly guaranteed. Therefore, Procedures A and B were administered during different school terms in order to minimize discussion of information concerning the experiment.



In Procedure B, after the personality communications were distributed and the subjects were able to read over them for about five minutes, they were told that the evaluations actually had nothing to do with their personalities, but that the research team was interested in whether or not they felt that the evaluations were believable, i.e., could be considered to have reference to a real person. The subjects were then asked to make a scale by drawing a six-inch horizontal line on their personality evaluation paper, to write highly believable on one end and highly unbelievable on the other, and then to place a check on the line at the point which seemed descriptive of their evaluation in terms of believability. The subjects then filled out the Index of Adjustment and Values and the sentence completion-items.

It should also be mentioned that the control subjects were recruited during the same term as those experimental subjects participating in Procedure B and were asked for the same information as the experimental groups, with the appropriate time interval intervening.

## CHAPTER III

### RESULTS

In this study, the main statistical method utilized was analysis of variance as described by Ferguson (1959). When significant F ratios were obtained, individual means were compared by t tests. It was decided that statistical significance would be set at the .05 level of probability.

#### Summary of Pretreatment Findings

##### Dogmatism Scores

The possible range of scores on the Dogmatism Scale is 280 to 40. The range in the present study was 205 to 89. Males and females were divided into high and low dogmatic groups. There were no significant differences in dogmatism scores between males and females in either Procedure A or B or in the control condition. Means and standard deviations are presented in Table 1.

##### Pretreatment Self-Concept

The possible range of Self scores on the Index of Adjustment and Values is 49 to 245, and in the present study the range was 100 to 219. Means and standard deviations for males and females and high and low dogmatism are shown in Table 2. No significant differences were found in Self scores for sex or dogmatism.

Table 1  
Dogmatism Scores

	N	Mean	Standard Deviation
Procedure A (Total)	128	155.60	25.67
Males	64	151.59	24.85
Females	64	159.61	26.48
Procedure B (Total)	112	152.71	24.08
Males	56	149.71	25.32
Females	56	155.71	22.82
Controls (Total)	102	152.28	24.80
Males	52	150.71	23.95
Females	50	153.86	25.66

Table 2  
Pretreatment Self-Concept Scores

	N	Mean	Standard Deviation
Procedure A (Total)	128	175.17	18.37
Males	64	175.53	20.84
Females	64	174.81	15.90
High Dogmatism	64	173.97	17.63
Low Dogmatism	64	176.38	19.14
Procedure B (Total)	112	177.54	17.71
Males	56	177.46	17.85
Females	56	177.60	17.59
High Dogmatism	56	176.02	18.90
Low Dogmatism	56	179.05	16.53
Controls (Total)	102	175.78	17.68
Males	52	176.13	17.92
Females	50	175.32	17.44
High Dogmatism	51	174.93	17.88
Low Dogmatism	51	176.63	17.48

### Pretreatment Self-Ideal Discrepancy Scores

The means and standard deviations of discrepancy scores can be seen in Table 3. Significant differences were found between both males and females and high and low dogmatic subjects for Procedure A but not for Procedure B or the control condition.

Table 3  
Pretreatment Discrepancy Scores

	N	Mean	Standard Deviation
Procedure A (Total)	128	47.40	17.72
Males	64	43.64*	20.31
Females	64	51.16**	15.16
High Dogmatism	64	51.56***	18.25
Low Dogmatism	64	43.23***	17.20
Procedure B (Total)	112	44.56	15.58
Males	56	42.68	15.33
Females	56	46.45	15.81
High Dogmatism	56	45.50	16.08
Low Dogmatism	56	43.62	15.06
Controls (Total)	102	45.71	16.28
Males	52	45.08	16.37
Females	50	46.34	16.19
High Dogmatism	51	46.33	15.94
Low Dogmatism	51	45.08	16.62

\*Significantly different from each other at .05.

\*\*\*Significantly different from each other at .02.

### SCAT Scores

School and College Ability Test (SCAT) scores were also used in this study in order to determine the contribution of intellectual level, if any, to the evaluation of information concerning the self. Since the form of the SCAT changes from year to year as given to beginning freshmen at the University of Florida, raw scores could not be used. Therefore, the more comparable percentile rank of each subject was taken and transformed into a McCall T score, which is a normalized equivalent of a given percentile rank. The means and standard deviations of the various groups are presented in Table 4. No significant differences between high and low dogmatism were found for Procedure A or B.

Table 4  
SCAT Scores\*

	N	Mean	Standard Deviation
Procedure A:**			
High Dogmatism	61	52.77	8.41
Low Dogmatism	57	52.87	8.88
Procedure B:**			
High Dogmatism	53	54.60	8.15
Low Dogmatism	53	54.24	8.23

\*Reported in terms of McCall T scores instead of raw scores.

\*\*Scores not available for all subjects.

### Posttreatment Findings

#### The Control Group

Before discussing the results of the experimental conditions, it would be helpful first to note the changes in self-concept and discrepancy scores in the control group over the one-week period. Control subjects, grouped according to high or low dogmatism, showed no significant changes in self-concept or discrepancy scores (Table 5).

Table 5  
Mean Changes in the Control Group After  
a One-Week Interval

	Self-Concept	Discrepancy
High Dogmatism	-0.31	-1.08
Low Dogmatism	-0.22	-0.94

#### Procedure A

Effects of the positive evaluations: self-concept and self-ideal discrepancy change of subjects given a Strongly Positive Evaluation (SPE) and a Mildly Positive Evaluation (MPE).--Compared with the appropriate control group, the subjects who received a SPE showed significant positive changes in self-concept in both high and low dogmatic groups, while those who received a MPE changed significantly only in the high dogmatic group. Thus, except for the low dogmatic subjects who received a MPE, all subjects changed significantly and in a positive direction. Self-Ideal

discrepancy showed significant decreases only in the SPE condition for both high and low dogmatic subjects (Table 6).

Table 6  
Self-Concept and Self-Ideal Discrepancy Change of  
Subjects Given a SPE and MPE (Procedure A)

	N	Self-Concept	Self-Ideal Discrepancy
SPE			
High Dogmatism	16	+15.50***	-11.06**
Low Dogmatism	16	+10.93***	- 8.50*
MPE			
High Dogmatism	16	+ 6.38*	- 5.06
Low Dogmatism	16	+ 0.38	- 3.00

\*Significantly different from equivalent control group mean at .05.

\*\*Significantly different from equivalent control group mean at .02.

\*\*\*Significantly different from equivalent control group mean at .01.

\*\*\*\*Significantly different from equivalent control group mean at .001.

In regard to part (a) of prediction 1, the SPE produced significantly greater positive change than the MPE for both high ( $t=2.70$ ,  $p < .05$ ) and low dogmatic subjects ( $t=3.52$ ,  $p < .02$ ), as predicted. No significant differences were obtained, however, for discrepancy scores either in the high or low dogmatic group (Table 6).

Contrary to part (b) of prediction 1, there were no significant differences in self-concept or discrepancy found between high and low dogmatic subjects given a SPE or MPE. The differences, although not significant, did reveal a greater change in self-concept and decrease in discrepancy for the high dogmatic subjects (Table 6).

Effects of the negative evaluations: self-concept and self-ideal discrepancy change of subjects given a Strongly Negative Evaluation (SNE) and a Mildly Negative Evaluation (MNE).---High dogmatic subjects who received a SNE showed significant positive changes in self-concept in relation to the control group, while low dogmatic subjects showed significant negative changes. Those subjects who received a MNE, however, were not significantly different from controls in terms of self-concept change. No significant differences in discrepancy scores were noted for subjects who received either a SNE or MNE (Table 7).

Table 7  
Self-Concept and Self-Ideal Discrepancy Change of  
Subjects Given a SNE and MNE (Procedure A)

	N	Self-Concept	Self-Ideal Discrepancy
SNE			
High Dogmatism	16	+10.69*	- 8.75
Low Dogmatism	16	- 6.81*	+ 3.19
MNE			
High Dogmatism	16	+ 4.50	- 4.12
Low Dogmatism	16	- 1.00	+ 2.88

\*Significantly different from equivalent control group mean at .05.



In regard to part (a) of prediction 2, the SNE produced positive change in self-concept in the high dogmatic group which was significantly greater than the low dogmatic group ( $t=3.64$ ,  $p < .01$ ), as predicted. However, this significant difference was obtained, in part, because of the change of the low dogmatic subjects in a negative direction, which was opposite to prediction. Furthermore, discrepancy scores decreased for the high dogmatic group and increased for the low dogmatic group and the difference between them was nearly significant ( $t=2.26$ ; 2.36 needed at .05) (Table 7).

According to part (b) of prediction 2, it was expected that the MNE would produce greater negative change in self-concept in the high dogmatic group relative to the low dogmatic group. However, this prediction was not confirmed. As can be seen in Table 7, the high dogmatic subjects actually tended to change their self-concept scores in a positive direction. Also, differences between discrepancy scores were not significant.

#### Procedure B

Effects of the positive evaluations: self-concept and self-ideal discrepancy change of subjects given a SPE and MPE.--Compared with equivalent control groups, both high and low dogmatic subjects who received an invalidated SPE and MPE showed significant positive changes in self-concept. Self-ideal discrepancy showed significant decreases, in relation to both the SPE and MPE but only among high dogmatic subjects (Table 8).

Table 8  
Self-Concept and Self-Ideal Discrepancy Change of  
Subjects Given a SPE and MPE (Procedure B)

	N	Self-Concept	Self-Ideal Discrepancy
SPE			
High Dogmatism	14	+12.21**	-10.50*
Low Dogmatism	14	+ 3.93*	- 3.21
MPE			
High Dogmatism	14	+ 5.57*	- 7.64**
Low Dogmatism	14	+ 3.50*	- 4.86

\*Significantly different from equivalent control group mean at .05.

\*\*Significantly different from equivalent control group mean at .01.

Contrary to part (a) of prediction 3, the SPE did not produce greater positive changes in self-concept or a greater decrease in self-ideal discrepancy in relation to the MPE, either in the high or low dogmatic group (Table 8).

In regard to part (b) of prediction 3, the high dogmatic subjects showed significantly greater change in self-concept in relation to the low dogmatic subjects in response to the SPE ( $t=2.54$ ,  $p < .05$ ), as predicted. There were no significant differences between groups in response to the MPE. Also, there were no significant differences in discrepancy scores between high and low dogmatic subjects, either for the SPE or MPE (Table 8).

Effects of the negative evaluations: self-concept and self-ideal discrepancy change of subjects given a SNE and MNE.--Following invalidation, only high dogmatic subjects who received a SNE showed any significant change in self-concept in relation to the control group. This change was in a positive direction. Also, no significant changes were noted for the SNE or MNE either in the high or low dogmatic groups (Table 9).

Table 9

Self-Concept and Self-Ideal Discrepancy Change of Subjects  
Given a SNE and MNE (Procedure B)

	N	Self-Concept	Self-Ideal Discrepancy
SNE			
High Dogmatism	14	+ 7.43*	- 6.50
Low Dogmatism	14	+ 2.50	- 3.00
MNE			
High Dogmatism	14	+ 5.64	- 3.36
Low Dogmatism	14	+ 0.21	- 2.50

\*Significantly different from equivalent control group mean at .01.

Contrary to part (a) of prediction 4, no significant differences were found between high and low dogmatic subjects in response to the SNE, either in terms of self-concept or self-ideal discrepancy. However, the difference in self-concept change between high and low dogmatic subjects was very close to significance ( $t=2.02$ ; 2.12 needed at .05) (Table 9).

As predicted in part (b) of prediction 4, no significant differences were found between high and low dogmatic subjects for the MNE, either in terms of self-concept or discrepancy change (Table 9).

Differences between male and female subjects.--Mean changes in self-concept and self-ideal discrepancy scores for male and female subjects over all the experimental conditions can be seen in Table 10. Contrary to prediction 5, the females in this study did not show significantly greater change in self-concept or self-ideal discrepancy than the males under any of the conditions. In fact, no consistent trend could be established, either for high or low dogmatic subjects.

Table 10

Comparison of Males and Females in Terms of Self-Concept and Self-Ideal  
Discrepancy Change Over All Conditions

(Procedure A)

	Self-Concept				Self-Ideal Discrepancy			
	SP	MP	SN	MN	SP	MP	SN	MN
High Dogmatism								
Males	+16.00	+ 6.50	+10.50	- 1.12	-11.62	- 0.50	- 3.00	+ 2.00
Females	+15.00	+ 6.25	+10.88	+10.12	-10.50	- 9.62	-14.50	-10.25
Low Dogmatism								
Males	+12.62	- 1.25	- 8.12	+ 0.50	-11.25	- 1.50	- 2.38	+ 3.00
Females	+ 8.12	+ 2.00	- 5.88	- 2.50	- 5.75	- 4.50	+ 8.75	+ 2.75

(Procedure B)

	Self-Concept				Self-Ideal Discrepancy			
	SP	MP	SN	MN	SP	MP	SN	MN
High Dogmatism								
Males	+12.57	+ 4.43	+ 6.43	+ 5.14	- 7.43	- 9.86	- 5.00	- 2.28
Females	+11.36	+ 6.71	+ 8.43	+ 6.14	-13.57	- 5.43	- 8.00	- 4.43
Low Dogmatism								
Males	+ 4.43	+ 3.14	+ 2.28	+ 1.14	- 2.71	- 3.86	- 2.14	- 2.71
Females	+ 3.43	+ 3.86	+ 2.71	- 0.71	- 3.71	- 5.86	- 3.86	- 2.28

## CHAPTER IV

### DISCUSSION

In this chapter, the results are discussed in terms of the major predictions and recent literature, and where discrepancies between the findings and predicted results were found, alternative explanations are attempted.

#### The Control Condition

In general, control subjects showed no significant changes in self-concept or discrepancy scores over the one-week interval, as anticipated. This finding gave confidence to the effects of the experimental treatments.

#### Procedure A

Effects of the positive and negative evaluations.--Because of the non-significant differences found between the high and low dogmatic subjects given either a SPE or MPE, it apparently cannot be concluded that open and closed types differ radically in their response to positive information concerning the self as was inferred from Rokeach's (1960) work. However, although it was not demonstrated conclusively, there was a tendency for the high dogmatic subjects to enhance their self-images by accepting the positive evaluations more readily than the low dogmatic subjects. Also, the interpretation of this finding may be clarified further in regard to the effects of the positive evaluations after invalidation, which will be discussed later.

Although changes in self-concept and self-ideal discrepancy for subjects given the negative evaluations did not consistently follow prediction, the findings were highly interesting and pointed to some important differences between open and closed types.

The most obvious finding which followed prediction was the consistent raising of self-concept scores and lowering of discrepancy scores among the high dogmatic subjects following the SNE and MNE. It can be confidently concluded that these results do indicate a pervasive defensive attitude toward depreciatory information concerning the self on the part of the high dogmatic subjects. Apparently, the defense mechanisms of denial and reaction formation were utilized for self-protection among these subjects.

As mentioned above, this defensive reaction was also seen in regard to the MNE when it was expected that the high dogmatic subjects would be pressured by high communicator credibility into changing in a negative direction. However, the effects of communicator credibility may have been somewhat lessened in their impact by the fact that there was probably minimal rapport established between individual subjects and the communicator because of the group procedure used in this study. As a consequence, the salience of the content of the MNE was apparently increased and the high dogmatic subjects were probably responding less to communicator credibility than to the threatening nature of the evaluation.

On the other hand, not only did the low dogmatic subjects not react defensively to the SNE as predicted, but they actually displayed

a willingness to comply with the evaluation by significantly decreasing their self-concept scores. This finding appeared to be directly opposite to the expectation based on Rokeach's (1960) theory that open belief systems (low dogmatic persons) would be less likely induced to change their self-beliefs when confronted with information about their selves. Apparently, the low dogmatic subjects dealt with a threat to their self-images by agreeing with the authoritative source of the personality evaluation and were thus able to devalue their concepts of themselves. The significance of this finding may be more fully understood after a discussion of the changes in self-concept found after the invalidation procedure.

#### Procedure B

Effects of the positive and negative evaluations.--The prediction of a greater amount of positive change in self-concept maintained by the high dogmatic subjects in relation to the low dogmatic subjects given a SPE was confirmed. This finding was consistent with the expectation that the high dogmatic subjects would more likely incorporate positive information concerning the self into their self-structures than the low dogmatic subjects. Thus, although high and low dogmatic subjects differed somewhat in their acceptance of positive information concerning the self (Procedure A), they differed greatly in terms of degree of assimilation of the information into their self-structures (Procedure B).

Concerning the effects of the negative evaluations, the only predicted change in self-concept was in the high dogmatic group which showed a significant positive change in response to the SNE. Also of



interest was the positive self-concept change of these high dogmatic subjects in response to the MNE. Although not significant, this change approached significance and again showed the same defensive-type pattern of response found among high dogmatic subjects given a MNE in Procedure A.

In comparing the response of the high and low dogmatic subjects to the SNE, the high dogmatic subjects displayed a nearly significant greater increase in self-concept scores in relation to the low dogmatic subjects, as predicted. This finding tended to confirm the notion that the self-system of the high dogmatic subjects counters threat by defensive denial and inflation of the self-image. Furthermore, this finding also strengthened the validity of the results of Procedure A.

As predicted, no significant differences in self-concept or discrepancy scores were found between high and low dogmatic subjects in response to the MNE. Apparently, the content of this evaluation was not threatening enough to mobilize drastic defensive maneuvers, especially among the high dogmatic subjects, and simply could be ignored with no changes in self-concept necessary when it was invalidated.

#### Sex differences

While it had been predicted that females, because of their supposed greater "suggestibility" than males, would show more change in self-concept, this prediction was not confirmed. This was contrary to the pattern found by Patel and Gordon (1960) and Weaver (1965). A possible explanation for the negative findings is the older age group utilized. While the two studies mentioned above used high school

seniors, this investigation used college subjects who, on the average, were in their second or third year of study and hence two or three years older as a group. Besides the difference in age per se, the college experience itself may have contributed to less "suggestibility" and naivete among the female subjects in this study. However, even before the college experience itself, there may be a selective factor operating in that girls who go to college may be considered to be more "masculine" in the sense of being less suggestible and hence would be expected to respond to communicator pressure more like college males than non-college females.

#### General effects of the positive and negative evaluation and their relation to recent research

For Procedure A, the general effect of the positive personality evaluations was to raise self-concept scores and lower self-ideal discrepancy scores among both high and low dogmatic subjects. This is compatible with Evans' (1962) finding that subjects will modify their self-descriptions in the direction of a "fake" positive personality evaluation. Weaver (1965) also found a uniform tendency among the subjects in his study to raise self-concept scores after a positive evaluation over the three self-concept levels utilized.

However, in Procedure B, there was evidence that the high and low dogmatic subjects differed appreciably in their response to positive information concerning the self when the information given was subsequently invalidated. As mentioned above, this finding was consistent with the theory of self-structure of open and closed types proposed

by Rokeach (1960) which views the closed mind as particularly prone to self-aggrandizement and ego enhancement. However, this finding seems to conflict with a recent study by Becker and Dileo (1967). These investigators used the Worchel Self-Activity Inventory's self-ideal discrepancy score (which had a significant positive correlation with a social desirability scale) as a measure of response set to present a positive personal image. It was found that low scorers on the Dogmatism Scale were motivated differentially to present a positive personal image. However, the findings of the present study suggest that the opposite is true, particularly when low dogmatic subjects are confronted with a threatening (to the self) situation. On the other hand, the Becker and Dileo study did not measure the effects of personality evaluations but merely indicated a relationship which revealed a difference between high and low dogmatic subjects in terms of presenting a positive personal image. In this regard, a response set to present a positive personal image is not only indicative of a propensity to indiscriminately put oneself in a favorable light, but may also be related to favorable adjustment or psychological health as measured, for example, by many of the items on the MMPI which are also interpretable in terms of positive response set. The implication for the Becker and Dileo study is that the Worchel discrepancy score may actually be measuring adjustment, in which case the lower self-ideal discrepancy scores of the low dogmatic subjects may be taken to indicate that they are better adjusted, less defensive, etc., a finding which is compatible with Rokeach (1960), Plant et al. (1965), and Fillenbaum and Jackman (1961). In terms of

the present study, the low dogmatic subjects did reveal a mainly insignificant but generally consistent pattern of lower self-ideal discrepancy scores on the IAV. As mentioned in Chapter II, Bills (1954) and Cowen et al. (1957) found less depression and anxiety respectively associated with a small discrepancy, implying healthier adjustment for low discrepancy scorers. Thus, the findings of the Becker and Dileo study tend to support the essential differences between high and low dogmatic subjects found in the present study.

The effect of the negative personality evaluations in Procedure A was to generally increase self-concept scores and lower self-ideal discrepancy scores among the high dogmatic subjects. Weaver (1965) also found this to be true of those subjects in his study who were highly anxious and hence seemed to be less well adjusted than the low anxious subjects. Thus, increase in self-concept among these highly anxious subjects could be viewed as a defensive reaction to threat similar to the reaction found among the high dogmatic subjects of the present study.

It was also predicted that the low dogmatic subjects would respond in a similar manner though in a lesser degree than the high dogmatic subjects, but this was not the case. Instead, their general lowering of self-concept and increase of self-ideal discrepancy scores were much the same as Evans' (1962) finding that the subjects in her study changed their self-descriptions in the direction of the "fake" negative evaluation. Thus, rather than responding in a mildly defensive way to the negative evaluations (primarily the SNE), the low dogmatic

subjects compliantly changed their self-concept scores in a negative direction. At first glance, it appears that the low dogmatic subjects were more influenced by high communicator credibility with respect to the SNE than were the high dogmatic subjects. And this indeed may have been the case. On the other hand, this reaction may be explained by what Rokeach (1960) has found to be the greater capacity of the low dogmatic person to form new belief systems. If this is true, the low dogmatic subjects may be considered to possess greater ability and/or willingness than the high dogmatic subjects to entertain new hypotheses about themselves in relation to a negative evaluation, even though these may be threatening and dangerous to self-esteem.

Procedure B further revealed the differential effect of the SNE on the high and low dogmatic subjects in that the high dogmatic subjects maintained positive change in their self-concept scores after invalidation. This finding again pointed to the closed self-structure of the high dogmatic person as a network of defensive and anxiety-reducing mechanisms employed to counter threat to self-esteem.

The general findings of the present study are in very close agreement with a recent study by Kleck and Wheaton (1967). These authors hypothesized that closed-minded (high dogmatic) subjects would demonstrate less recall of information not consistent with their opinions than open-minded (low dogmatic) subjects. They also proposed that closed-minded subjects would evaluate opinion-consistent information more favorably than open-minded subjects. Both of these predictions were verified. The high dogmatic subjects' "forgetting" of opinion-

inconsistent information in the Kleck and Wheaton study may be considered a defensive reaction similar to that found among high dogmatic subjects given a negative personality evaluation in the present study. Although the mechanisms for dealing with apparently threatening information were different in the two studies, the dynamics were the same in that the closed belief structure of the high dogmatic subjects employed defensive maneuvers to counter the anxiety produced by the threatening nature of either the opinion-inconsistent information or the negative personality evaluations. Also, the greater propensity of the closed-minded subjects to evaluate opinion-consistent information more favorably is highly similar to the finding in the present study that these subjects tended to accept and assimilate positive information about their selves more readily than open-minded subjects.

#### Suggestions for Future Research

An important consideration for future studies in this area is measurement of the stability of change in self-concept over some time interval after experimental manipulation. It is altogether possible that changes in self-concept as produced in this study were quite transient or may be more or less stable in relation to certain identifiable personality characteristics. Some of the findings of the present study suggest that more stable change may be associated with high dogmatism rather than with low dogmatism.

It had been planned to study the effects of a week interval on self-report, but it was discovered that the subjects who participated

in Procedure A responded very emotionally to the negative evaluations. It became readily apparent at this point that some subjects might possibly be harmed by this procedure if they were not informed immediately concerning the true nature of the evaluations. Thus, before the effects of time on self-report after induced change can be studied, the problem of the subject's emotional response must first be surmounted.

## CHAPTER V

### SUMMARY

Two hundred and forty beginning psychology students at the University of Florida were given the Dogmatism Scale as a measure of open and closed belief systems and the Index of Adjustment and Values as a self-concept and ideal-self measure. In addition, some sentence-completion items were also included to increase the plausibility of the experimental situation in relation to the disclosure of personality characteristics. The subjects were divided into high and low dogmatic groups. A strongly positive (SPE) and mildly positive (MPE) and a strongly negative (SNE) and mildly negative (MNE) personality evaluation was devised based on items from the Index of Adjustment and Values which dealt with various aspects of personality and adjustment. Each subject was given only one of the personality evaluations. There were two experimental procedures. In Procedure A, after the personality evaluations were given, the Index of Adjustment and Values was readministered along with some new sentence-completion items. Subjects were then told they had received fake evaluations. In Procedure B, the personality evaluations were given in the same manner as Procedure A, but were then immediately invalidated by the experimenter. The Index of Adjustment and Values and the sentence-completion items were then given. Control subjects were tested and retested after the appropriate time interval.

The major hypotheses and predictions were derived from Rokeach's theory concerning the belief systems of open-and closed-minded types.



It was predicted that:

1. Positiveness of the personality evaluation (strong and mild) would (a) produce corresponding changes in self-concept (positive direction) which (b) would be greater for high dogmatism than for low dogmatism.
2. (a) A strongly negative personality evaluation would produce a "boomerang effect" (change in a positive direction) which would be greater for high dogmatism, while (b) a mildly negative evaluation would produce change in self-concept in a negative direction which would be greater for high dogmatism.
3. Following invalidation of the positive evaluations, (a) changes in self-concept would be greater for the strongly positive evaluation and (b) the changes would be more readily maintained by high dogmatism.
4. Following invalidation, (a) positive change by high dogmatism due to the strongly negative evaluation would tend to be maintained more readily relative to low dogmatism, while (b) negative change due to the mildly negative evaluation would be maintained by neither high nor low dogmatic subjects.
5. Females would show more change in self-concept than males under all conditions, with the females producing the most change relative to the males in relation to high dogmatism.

The predictions were partially confirmed. In regard to the specific predictions, the following results were obtained:

1. The SPE produced greater positive change than the MPE, as predicted. Contrary to prediction, high and low dogmatic subjects did not differ significantly.
2. As predicted, the SNE produced greater positive change among the high dogmatic subjects. The prediction of greater negative change among the high dogmatic subjects in response to the MNE was not confirmed.
3. After invalidation, the SPE did not produce greater positive changes than the MPE, which was contrary to prediction. As predicted, the high dogmatic subjects showed greater positive change than the low dogmatic subjects in response to the SPE, but not to the MPE.

4. As predicted, the SNE produced greater positive change among the high dogmatic subjects. Also, there were no significant differences between high and low dogmatic subjects in response to the MNE, as predicted.
5. Contrary to prediction, no significant differences were found between males and females in terms of self-concept change.

The results were discussed in terms of the differences between open and closed belief systems as delineated by Rokeach's theory and were related to recent research. Suggestions for future research were offered.

## APPENDICES

Appendix A

INSTRUCTIONS AND SCORE SHEET FOR THE D SCALE

NAME \_\_\_\_\_

Student No. \_\_\_\_\_

The following is a study of what college students think and feel about a number of important social and personal questions. The best answer to each statement below is your personal opinion. We have tried to cover many different and opposing points of view; you may find yourself agreeing strongly with some of the statements, disagreeing just as strongly with others, and perhaps uncertain about others; whether you agree or disagree with any statement, you can be sure that many people feel the same as you do.

Mark each statement in the left margin according to how much you agree or disagree with it. Please mark every one. Write +1, +2, +3, or -1, -2, -3, depending on how you feel in each case.

+1: I AGREE A LITTLE

-1: I DISAGREE A LITTLE

+2: I AGREE ON THE WHOLE

-2: I DISAGREE ON THE WHOLE

+3: I AGREE VERY MUCH

-3: I DISAGREE VERY MUCH

- \_\_\_ 1. The United States and Russia have just about nothing in common.
- \_\_\_ 2. The highest form of government is a democracy and the highest form of democracy is a government run by those who are the most intelligent.
- \_\_\_ 3. Even though freedom of speech for all groups is a worthwhile goal, it is unfortunately necessary to restrict the freedom of certain political groups.
- \_\_\_ 4. It is only natural that a person would have a much better acquaintance with ideas he believes in than with ideas he opposes.
- \_\_\_ 5. Man on his own is a helpless and miserable creature.
- \_\_\_ 6. Fundamentally, the world we live in is a pretty lonesome place.
- \_\_\_ 7. Most people just don't give a "damn" for others.
- \_\_\_ 8. I'd like it if I could find someone who would tell me how to solve my personal problems.
- \_\_\_ 9. It is only natural for a person to be rather fearful of the future.

- \_\_\_10. There is much to be done and so little time to do it in.
- \_\_\_11. Once I get wound up in a heated discussion I just can't stop.
- \_\_\_12. In a discussion I often find it necessary to repeat myself several times to make sure I am being understood.
- \_\_\_13. It is better to be a dead hero than to be a live coward.
- \_\_\_14. In a heated discussion I generally become so absorbed in what I am going to say that I forget to listen to what the others are saying.
- \_\_\_15. While I don't like to admit this even to myself, my secret ambition is to become a great man, like Einstein, or Beethoven, or Shakespeare.
- \_\_\_16. The main thing in life is for a person to want to do something important.
- \_\_\_17. If given the chance I would do something of great benefit to the world.
- \_\_\_18. In the history of mankind there have probably been just a handful of really great thinkers.
- \_\_\_19. There are a number of people I have come to hate because of the things they stand for.
- \_\_\_20. A man who does not believe in some great cause has not really lived.
- \_\_\_21. It is only when a person devotes himself to an ideal or cause that life becomes meaningful.
- \_\_\_22. Of all the different philosophies that exist in this world there is probably only one which is correct.
- \_\_\_23. A person who gets enthusiastic about too many causes is likely to be a pretty "wishy-washy" sort of person.
- \_\_\_24. To compromise with our political opponents is dangerous because it usually leads to the betrayal of our own side.
- \_\_\_25. When it comes to differences of opinion in religion we must be careful not to compromise with those who believe differently from the way we do.
- \_\_\_26. In times like these, a person must be pretty selfish if he considers primarily his own happiness.

- \_\_\_27. The worst crime a person could commit is to attack publicly the people who believe in the same thing he does.
- \_\_\_28. In times like these it is often necessary to be more on guard against ideas put out by people or groups in one's own camp than by those in the opposing camp.
- \_\_\_29. A group which tolerates too much difference of opinion among its own members cannot exist for long.
- \_\_\_30. There are two kinds of people in this world: those who are for the truth and those who are against the truth.
- \_\_\_31. My blood boils whenever a person stubbornly refuses to admit he's wrong.
- \_\_\_32. A person who thinks primarily of his own happiness is beneath contempt.
- \_\_\_33. Most of the ideas that get printed nowadays aren't worth the paper they are printed on.
- \_\_\_34. In this complicated world of ours the only way we can know what's going on is to rely on leaders or experts who can be trusted.
- \_\_\_35. It is often desirable to reserve judgment about what's going on until one has had a chance to hear the opinions of those one respects.
- \_\_\_36. In the long run the best way to live is to pick friends and associates whose tastes and beliefs are the same as one's own.
- \_\_\_37. The present is all too often full of unhappiness. It is only the future that counts.
- \_\_\_38. If a man is to accomplish his mission in life it is sometimes necessary to gamble "all or nothing at all."
- \_\_\_39. Unfortunately, a good many people with whom I have discussed important social and moral problems don't really understand what's going on.
- \_\_\_40. Most people just don't know what's good for them.

## Appendix B

### INSTRUCTIONS AND SCORE SHEET FOR THE IAV

PLEASE READ THE COMPLETE INSTRUCTIONS BEFORE  
GIVING ANY ANSWERS.

There is a need for each of us to know more about ourselves, but seldom do we have an opportunity to look at ourselves as we are or as we would like to be. On the following page is a list of terms which to a certain degree describe people. Take each term separately and apply it to yourself by completing the following sentence:

I AM A (AN) \_\_\_\_\_ PERSON.

The first word in the list is academic, so you would substitute this term in the above sentence. It would read---I am an academic person.

Then decide HOW MUCH OF THE TIME this statement is like you, i.e., is typical or characteristic of you as an individual, and rate yourself from one to five according to the following scale:

1. Seldom, is this like me.
2. Occasionally, is this like me.
3. About half of the time, this is like me.
4. A good deal of the time, this is like me.
5. Most of the time, this is like me.

Select the number beside the phrase that tells how much of the time the statement is like you and insert it in column I on the next page.  
EXAMPLE: Beside the term ACADEMIC, number two is inserted to indicate that---occasionally, I am an academic person.

Now go to column II; using the same term, complete the following sentence:

I WOULD LIKE TO BE A (AN) \_\_\_\_\_ PERSON.

Then decide HOW MUCH OF THE TIME you would like this trait to be characteristic of you and rate yourself on the following five point scale:

1. Seldom, would I like this to be me.
2. Occasionally, I would like this to be me.
3. About half of the time, I would like this to be me.
4. A good deal of the time, I would like this to be me.
5. Most of the time, I would like this to be me.

You will select the number beside the phrase that tells how much of the time you would like to be this kind of a person and insert the number in column II.

EXAMPLE: In column II beside the term ACADEMIC, number five is inserted to show that---most of the time, I would like to be this kind of a person.

Start with the word ACCEPTABLE and fill in columns I and II before going on to the next word. Be honest with yourself so that your description will be a true measure of how you look at yourself.

	I	II		I	II
EXAMPLE: <u>ACADEMIC</u>	<u>2</u>	<u>5</u>	25. meddlesome	_____	_____
1. acceptable	_____	_____	26. merry	_____	_____
2. accurate	_____	_____	27. mature	_____	_____
3. alert	_____	_____	28. nervous	_____	_____
4. ambitious	_____	_____	29. normal	_____	_____
5. annoying	_____	_____	30. optimistic	_____	_____
6. busy	_____	_____	31. poised	_____	_____
7. calm	_____	_____	32. purposeful	_____	_____
8. charming	_____	_____	33. reasonable	_____	_____
9. clever	_____	_____	34. reckless	_____	_____
10. competent	_____	_____	35. responsible	_____	_____
11. confident	_____	_____	36. sarcastic	_____	_____
12. considerate	_____	_____	37. sincere	_____	_____
13. cruel	_____	_____	38. stable	_____	_____
14. democratic	_____	_____	39. studious	_____	_____
15. dependable	_____	_____	40. successful	_____	_____
16. economical	_____	_____	41. stubborn	_____	_____
17. efficient	_____	_____	42. tactful	_____	_____
18. fearful	_____	_____	43. useful	_____	_____
19. friendly	_____	_____	44. teachable	_____	_____
20. fashionable	_____	_____	45. worthy	_____	_____
21. helpful	_____	_____	46. broad-minded	_____	_____
22. intellectual	_____	_____	47. businesslike	_____	_____
23. kind	_____	_____	48. competitive	_____	_____
24. logical	_____	_____	49. fault-finding	_____	_____



## Appendix C

### SENTENCE-COMPLETION ITEMS

Complete the following sentences as rapidly as you can. Write down the first thing you think of.

#### Pretreatment:

1. When I study . . . .
2. I admire . . . .
3. I try hard . . . .
4. When I'm alone . . . .
5. A person's life . . . .
6. The thing I want most out of life . . . .
7. My greatest fear is . . . .
8. I am best when . . . .
9. It's hard to keep from worrying about . . . .
10. The best thing I ever did . . . .

#### Posttreatment:

1. I could hate a person who . . . .
2. Most of all I want . . . .
3. I feel guilty about . . . .
4. I feel happiest about . . . .
5. The worst thing I can think of . . . .
6. I feel sad about . . . .
7. I feel that people . . . .
8. I daydream . . . .
9. Love is . . . .
10. My worst fault . . . .

Appendix D  
POSITIVE EVALUATIONS

SPE

After an evaluation of your test results, we have basically found that your life adjustment is superior to that of the average person.

You are generally at ease and take the initiative in your daily interaction with people, and thus you find little need to constantly strive to please them. You almost always "fit" into a social gathering in a really comfortable way.

Basically, you are an optimistic, friendly, and broad-minded person who rarely acts toward others in a suspicious and sarcastic manner. You attempt to act sincerely in whatever you undertake, and you seem to understand well the motivations for your own behavior and the behavior of others.

Your achievement goals tend to be high but nevertheless fairly compatible with your abilities. Thus, failure should be unlikely since you usually act realistically in these matters.

Fundamentally, you are a clever and astute person and are rarely annoying to your friends and acquaintances. You are more mature and poised than most persons your age and, though you may lapse at times, you usually appear to be a competent individual.

In general, the person you are striving to become is nearly in your grasp, and you are well on your way to attaining your life goals.

MPE

After an evaluation of your test results, we have basically found that your life adjustment is about the same as that of the average person.

You are usually at ease in your daily interaction with people and, though sometimes overly desirous of their approval, you are not constantly striving to please them. It seems to be the exception rather than the rule that you might have difficulty "fitting" into a social gathering in a comfortable way.

Most of the time you impress people as being a fairly optimistic, friendly, and broad-minded person, but you do have the potentiality of acting toward others in a sarcastic and suspicious manner. Fundamentally, you seem to be a sincere person and understand the motivations for your behavior as well as most people.

Your achievement goals are sometimes set too high but not so much as to be totally unrealistic. Hence, you can sometimes accept failure as a spur to greater accomplishment.

There are times when you can be a clever and astute person, though it is possible that some people may find you annoying. You are not highly competent at all times, but you do possess the ability to act in a fairly mature manner.

In general, the person you want to become may sometimes escape your grasp, but you have a fairly adequate start toward attaining your life goals.

Appendix E  
NEGATIVE EVALUATIONS

SNE

After an evaluation of your test results, we have basically found that your life adjustment is inferior to that of the average person.

You are quite fearful in your daily interaction with people, and because of this you strive much too hard to please them. You almost always find it difficult to "fit" into a social gathering in a really comfortable way.

On the surface you impress people as being an optimistic, friendly, and broad-minded person, but actually you act toward others in a highly suspicious and sarcastic manner. You may think you are a sincere person, but you are utterly unaware of the true motivations for your behavior.

You are intellectually pretentious, but you also have a nagging fear of failure. This is something you cannot admit to yourself.

Oftentimes, you think you are clever when in reality you are very annoying to those around you. You have a great capacity for deluding yourself into believing that you act in a mature and poised manner, when in actuality you appear incompetent to others.

In general, the person you are striving to become is far from your grasp, and you can expect to have great difficulty in attaining your life goals.

MNE

After an evaluation of your test results, we have basically found that your life adjustment is slightly below that of the average person.

You are a bit apprehensive in your daily interaction with people, and because of this you strive a little too hard to please them. It is sometimes difficult for you to "fit" into a social situation in a really comfortable way.

Most of the time, you impress people as being an optimistic, friendly, and broad-minded person, but actually you sometimes act toward others in a sarcastic and suspicious manner. You are probably a sincere person, but you are unaware of many of the true motivations for your behavior.

Intellectually you have many pretensions, but you are also afraid of failure to some extent. This is something you find hard to admit to yourself.

Oftentimes, you think you are clever when the fact is you might be actually aggravating others. At times you act in a mature and poised manner and at other times you do not appear too competent.

In general, the person that you want to become is not far from your grasp, but you can expect to encounter some difficulty in attaining your life goals.

## Appendix F

## VARIANCE RATIOS FOR THE MAJOR VARIABLES

Table 11

Two-way Analysis of Variance of Self-Concept Change  
Scores for Males and Females (Procedure A)

Source	SS	df	MS	F
Dogmatism	2346.13	1	2346.13	17.50**
Personality Evaluations	2751.09	3	917.03	6.84*
Dogmatism x Personality Evaluations	879.13	3	293.04	2.18
Error	16,091.62	120	134.10	

\*Significant at .01 level.

\*\*Significant at .001 level.

Table 12

Two-way Analysis of Variance of Self-Ideal Discrepancy  
Change Scores for Males and Females  
(Procedure A)

Source	SS	df	MS	F
Dogmatism	1122.20	1	1122.20	5.53*
Personality Evaluations	1484.52	3	494.84	2.43
Dogmatism x Personality Evaluations	510.53	3	170.18	0.84
Error	24,391.06	120	203.26	

\*Significant at the .05 level.

Table 13

Two-way Analysis of Variance of Self-Concept Change  
Scores for Males and Females (Procedure B)

Source	SS	df	MS	F
Dogmatism	657.03	1	657.03	9.38*
Personality Evaluations	340.03	3	113.34	1.58
Dogmatism x Personality Evaluations	119.03	3	39.68	0.57
Error	7285.88	104	70.05	

\*Significant at .01 level.

Table 14

Two-way Analysis of Variance of Self-Ideal Discrepancy  
Change Scores for Males and Females  
(Procedure B)

Source	SS	df	MS	F
Dogmatism	318.78	1	318.78	2.68
Personality Evaluations	225.66	3	75.22	0.63
Dogmatism x Personality Evaluations	133.40	3	44.47	0.37
Error	12,388.88	104	119.12	

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## BIOGRAPHICAL SKETCH

Michael Victor Fromhart was born in Detroit, Michigan, on July 6, 1941. He attended the University of Detroit High School and Central Catholic High School in Fort Lauderdale, Florida. He graduated from the latter in June, 1959. He attended the University of Florida from 1959 to 1963 and received the degree Bachelor of Arts with honors in June, 1963. In 1963 he enrolled in the Graduate School of the University of Florida and received the degree of Master of Arts in April, 1965. During his graduate career he was awarded fellowships from the U. S. Public Health Service and the Graduate School of the University of Florida.

Michael Victor Fromhart is married to the former Donna Jean Gurnic. He is a member of Phi Beta Kappa and Alpha Epsilon Delta.

This dissertation was prepared under the direction of the chairman of the candidate's supervisory committee and has been approved by all members of that committee. It was submitted to the Dean of the College of Arts and Sciences and to the Graduate Council, and was approved as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August, 1967

Ernest H. Cox  
Dean, College of Arts and Sciences

\_\_\_\_\_  
Dean, Graduate School

Supervisory Committee:

Chairman

Anderson

Harry A. Smith Jr.

Andrew S. Schumacher

E. William Beck